



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/817,525

DATE: 08/26/2004

TIME: 11:47:58

Input Set : A:\099-US1.ST25.txt

Output Set: N:\CRF4\08262004\J817525.raw

3 <110> APPLICANT: Quark Biotech, Inc.
 4 Byk, Tamara
 5 Chajut, Ayelet
 7 <120> TITLE OF INVENTION: sFRP1 and Uses Thereof
 9 <130> FILE REFERENCE: 69222-A; 099/US1
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/817,525
C--> 11 <141> CURRENT FILING DATE: 2004-04-01
 11 <160> NUMBER OF SEQ ID NOS: 2
 13 <170> SOFTWARE: PatentIn version 3.2
 15 <210> SEQ ID NO: 1
 16 <211> LENGTH: 4469
 17 <212> TYPE: DNA
 18 <213> ORGANISM: Homo sapiens
 21 <220> FEATURE:
 22 <221> NAME/KEY: CDS
 23 <222> LOCATION: (303)..(1244)
 25 <400> SEQUENCE: 1

26 cctgcagcct ccggagtca tag tgccgcgcgc cccgcgcgc ggcgccttct gctcgccgca 28 cctccggagg ccggggcgca cccagccgc agcgccgcct cccgcgcgc ggcgcctccg 30 accgcaggcc gagggccgccc actggccggg gggaccgggc agcagcttgc ggccgeggag 32 ccggcaacg ctggggactg cgccctttgt ccccgaggt ccctggaagt ttgcggcagg 34 acgcgcgcgg ggaggcggcg gaggcagccc cgacgtcgcg gagaacaggg cgacagagccg 36 gc atg ggc atc ggg cgc agc gag ggg ggc cgc cgc ggg gcc ctg ggc 37 Met Gly Ile Gly Arg Ser Glu Gly Arg Arg Gly Ala Leu Gly 38 1 5 10 15	ENTERED
	60
	120
	180
	240
	300
	347
40 gtg ctg ctg gcg ctg ggc gcg ctt ctg gcc gtg ggc tcg gcc agc 41 Val Leu Leu Ala Leu Gly Ala Ala Leu Leu Ala Val Gly Ser Ala Ser	395
42 20 25 30	
44 gag tac gac tac gtg agc ttc cag tcg gac atc ggc ccg tac cag agc 45 Glu Tyr Asp Tyr Val Ser Phe Gln Ser Asp Ile Gly Pro Tyr Gln Ser	443
46 35 40 45	
48 ggg cgc ttc tac acc aag cca cct cag tgc gtg gac atc ccc gcg gac 49 Gly Arg Phe Tyr Thr Lys Pro Pro Gln Cys Val Asp Ile Pro Ala Asp	491
50 50 55 60	
52 ctg cgg ctg tgc cac aac gtg ggc tac aag aag atg gtg ctg ccc aac 53 Leu Arg Leu Cys His Asn Val Gly Tyr Lys Lys Met Val Leu Pro Asn	539
54 65 70 75	
56 ctg ctg gag cac gag acc atg gcg gag gtg aag cag cag gcc agc agc 57 Leu Leu Glu His Glu Thr Met Ala Glu Val Lys Gln Gln Ala Ser Ser	587
58 80 85 90 95	
60 tgg gtg ccc ctg ctc aac aag aac tgc cac gcc ggg acc cag gtc ttc 61 Trp Val Pro Leu Leu Asn Lys Asn Cys His Ala Gly Thr Gln Val Phe	635
62 100 105 110	

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64	ctc	tgc	tcg	ctc	tcc	gcg	ccc	gtc	tgc	ctg	gac	cgg	ccc	atc	tac	ccg		683
65	Leu	Cys	Ser	Leu	Phe	Ala	Pro	Val	Cys	Leu	Asp	Arg	Pro	Ile	Tyr	Pro		
66				115					120					125				
68	tgt	cgc	tgg	ctc	tgc	gag	gcc	gtg	cgc	gac	tgc	gag	ccg	gtc	atg		731	
69	Cys	Arg	Trp	Leu	Cys	Glu	Ala	Val	Arg	Asp	Ser	Cys	Glu	Pro	Val	Met		
70				130					135				140					
72	cag	ttc	ttc	ggc	ttc	tac	tgg	ccc	gag	atg	ctt	aag	tgt	gac	aag	ttc		779
73	Gln	Phe	Phe	Gly	Phe	Tyr	Trp	Pro	Glu	Met	Leu	Lys	Cys	Asp	Lys	Phe		
74				145					150				155					
76	ccg	gag	ggg	gac	gtc	tgc	atc	gcc	atg	acg	ccg	ccc	aat	gcc	acc	gaa		827
77	Pro	Glu	Gly	Asp	Val	Cys	Ile	Ala	Met	Thr	Pro	Pro	Asn	Ala	Thr	Glu		
78	160			165					170				175					
80	gcc	tcc	aag	ccc	caa	ggc	aca	acg	gtg	tgt	cct	ccc	tgt	gac	aac	gag		875
81	Ala	Ser	Lys	Pro	Gln	Gly	Thr	Thr	Val	Cys	Pro	Pro	Cys	Asp	Asn	Glu		
82				180					185				190					
84	ttg	aaa	tct	gag	gcc	atc	att	gaa	cat	ctc	tgt	gcc	agc	gag	ttt	gca		923
85	Leu	Lys	Ser	Glu	Ala	Ile	Ile	Glu	His	Leu	Cys	Ala	Ser	Glu	Phe	Ala		
86				195					200				205					
88	ctg	agg	atg	aaa	ata	aaa	gaa	gtg	aaa	aaa	gaa	aat	ggc	gac	aag	aag		971
89	Leu	Arg	Met	Lys	Ile	Lys	Glu	Val	Lys	Lys	Glu	Asn	Gly	Asp	Lys	Lys		
90				210					215				220					
92	att	gtc	ccc	aag	aag	aag	aag	ccc	ctg	aag	ttg	ggg	ccc	atc	aag	aag		1019
93	Ile	Val	Pro	Lys	Lys	Lys	Pro	Leu	Lys	Leu	Gly	Pro	Ile	Lys	Lys			
94				225					230				235					
96	aag	gac	ctg	aag	aag	aag	ctt	gtg	ctg	ctg	aag	aat	ggg	gct	gac	tgt		1067
97	Lys	Asp	Leu	Lys	Lys	Leu	Val	Leu	Tyr	Leu	Lys	Asn	Gly	Ala	Asp	Cys		
98	240			245					250				255					
100	ccc	tgc	cac	cag	ctg	gac	aac	ctc	agc	cac	cac	ttc	ctc	atc	atg	ggc		1115
101	Pro	Cys	His	Gln	Leu	Asp	Asn	Leu	Ser	His	His	Phe	Leu	Ile	Met	Gly		
102				260					265				270					
104	cgc	aag	gtg	aag	agc	cag	tac	ttg	ctg	acg	gcc	atc	cac	aag	tgg	gac		1163
105	Arg	Lys	Val	Lys	Ser	Gln	Tyr	Leu	Leu	Thr	Ala	Ile	His	Lys	Trp	Asp		
106				275					280				285					
108	aag	aaa	aac	aag	gag	ttc	aaa	aac	ttc	atg	aag	aaa	atg	aaa	aac	cat		1211
109	Lys	Lys	Asn	Lys	Glu	Phe	Lys	Asn	Phe	Met	Lys	Lys	Met	Lys	Asn	His		
110				290					295				300					
112	gag	tgc	ccc	acc	ttt	cag	tcc	gtg	ttt	aag	tga	ttctccggg	ggcagggtgg				1264	
113	Glu	Cys	Pro	Thr	Phe	Gln	Ser	Val	Phe	Lys								
114				305					310									
116	ggagggagcc	tcgggtgggg	tggagcggg	ggggacagtg	cccgaaaaacc	cgtggtcaca												1324
118	cacacgca	ccctgtcg	act	tagtgacat	tgtatccag	tgcgttgc	tttgcagcat											1384
120	tccgcgtccc	tttccctcca	tagccacgt	ccaaacccca	ggtagccat	ggccgggtaa												1444
122	agcaagggcc	attttagatta	ggaaggttt	taagatccgc	aatgtggagc	agcagccact												1504
124	gcacaggagg	aggtgacaaa	ccatttccaa	cagcaacaca	gccactaaaa	cacaaaaagg												1564
126	gggattggc	ggaaagtgg	agccagcagc	aaaaactaca	tttgcaact	tgttgggtgt												1624
128	gatctattgg	ctgatctatg	ccttcact	agaaaattct	aatgattggc	aagtcacgtt												1684
130	gtttcaggt	ccagagtgt	ttcttcgt	ctgctttaaa	tggaaacaga	ctcataaccac												1744
132	acttacaatt	aaggtaagc	ccagaaatgt	ataagtgcag	ggaggaaaag	tgcaagtcca												1804
134	ttatctaata	gtgacagcaa	agggaccagg	ggagaggcat	tgccctctct	gccccacagtc												1864

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136	tttccgtgtg attgtctttg aatctgaatc agccagtctc agatccccca aagttcggt	1924
138	tcctatgagc ccggggcatg atctgatccc caagacatgt ggaggggcag cctgtgcctg	1984
140	ccttggtgc agaaaaaggaa aaccacagtg agcctgagag agacggcgat ttcgggctg	2044
142	agaaggcagt agttaaaaacaa acacatagtt aaaaaagaaa caaatgaaaa aaattttaga	2104
144	acagttccagc aaattgctag tcagggtgaa ttgtgaaatt gggtaagag cttaggatc	2164
146	taatctcatg tttttcctt ttcacatTTT taaaagaaca atgacaaaca cccacttatt	2224
148	tttcaaggtt taaaacagt ctacattgag catttggaaag gtgtgctaga acaaggctc	2284
150	ctgatccgtc cgaggctgct tcccagagga gcagctctcc ccaggcattt gccaaggggag	2344
152	gcggatttcc ctggtagtgt agctgtgtgg ctttccttcc tgaagagtcc gtgggtgcc	2404
154	tagaacctaa cacccttag caaaactcac agagcttcc gttttttct ttccgtaaa	2464
156	gaaacatttc cttgaactt gattgcctat ggatcaaaga aattcagaac agcctgcctg	2524
158	ttccccgc a ctttttacat atattgttt catttctgca gatggaaagt tgacatgggt	2584
160	gggggtgtccc catccagcgaa gagagttca aaagcaaaac atctctgcag ttttcccaa	2644
162	gtacccttag atacttccca aagcccttat gtttaatcag cgatgtataat aagccagttc	2704
164	acttagacaa ctttaccctt cttgtccaaat gtacaggaag tagttctaaa aaaaatgcatt	2764
166	attaattttct tcccccaaaag ccggatttctt aattctctgc aacactttga ggacatttat	2824
168	gattgtccct ctgggccaat gcttataccc agtgaggatg ctgcagttag gctgtaaagt	2884
170	ggcccccgtc ggccttagcc tgaccggag aaaggatggt agattctgtt aactctgaa	2944
172	gactccagta tgaaaatcag catggccgccc tagttaccta ccggagagtt atcctgataa	3004
174	attaacctct cacagtttagt gatcctgtcc tttaacacc tttttgtgg gtttctctct	3064
176	gaccttcat cgtaaaagtgc tgggacctt aagtgatttgc cctgtatTTT tggatgatta	3124
178	aaaaatgtgt atatatatta gctaattaga aatattctac ttctctgttgc tcaaactgaa	3184
180	attcagagca agttccctgag tgcgtggatc tgggtcttag ttctgggtga ttcactcaag	3244
182	agttcagtgc tcatacgtat ctgcattt tgacaaagtgc cctcatgcaaa ccggccctc	3304
184	tctctgcggc agagtccttta gtggaggggtt taccctggaa cataagtagt taccacagaa	3364
186	tacggaaagag caggtgactg tgctgtgcag ctctctaaat gggattctc aggttaggaag	3424
188	caacagctc agaaagagct caaaaataat tggaaatgtg aatcgcagct gtgggtttta	3484
190	ccaccgtctg tctcagagtc ccaggacctt gagtgcattt agttacttta ttgaaggttt	3544
192	tagaccata gcagctttgt ctctgtcaca tcagcaattt cagaacaaa aggaggctc	3604
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196	aaaccaatgt gcagactgat tggcctggtc attggctcc gagagaggag gtttgcctgt	3724
198	gattgcctg tgatttccta attatcgta gggcaagggtt gggatttgc aagctttaca	3784
200	ataatcatcc tggatagagt cctggaggt cttggcaga actcagttaa atctttgaag	3844
202	aatatttgc tttatcttag aagatagcat gggaggtgag gattccaaaa acattttatt	3904
204	ttttaaaat cctgtgtaaac acttggctct tggtagcttgcatttgc aagttctcc	3964
206	ccagggtaga attcaatcag agctccagtt tgcatttggaa tggtaatTTT acagtaatcc	4024
208	catttccaa acctaaaatc tgtttctc atcagactct gagtaactgg ttgctgtgtc	4084
210	ataacttcat agatgcagga ggctcagggtg atctgtttga ggagagcacc ctggcagcc	4144
212	tgcaggaaat aacatactgg ccgttctgac ctgttgcag cagatacaca ggacatggat	4204
214	gaaattcccg ttcttcctg tagtactctt ctttttagatc ctaagtctct	4264
216	tacaaaagct ttgaatactg tgaaaatgtt ttacatTCCTT tttcattttgtt gtttttttt	4324
218	taactgcatt ttaccagatg ttttgcatttgcatttgc ttaatagtaa ttcccgtacg	4384
220	ttttcattttt attttcatgc ttttcagcc atgtatcaat attcacttgc ctaaaaatcac	4444
222	tcaattaaatc aatgaaaaaaaaaaaa	4469
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226	<211> LENGTH: 313	
227	<212> TYPE: PRT	
228	<213> ORGANISM: Homo sapiens	
230	<400> SEQUENCE: 2	

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232 Met Gly Ile Gly Arg Ser Glu Gly Gly Arg Arg Gly Ala Leu Gly Val
233 1 5 10 15
236 Leu Leu Ala Leu Gly Ala Ala Leu Leu Ala Val Gly Ser Ala Ser Glu
237 20 25 30
240 Tyr Asp Tyr Val Ser Phe Gln Ser Asp Ile Gly Pro Tyr Gln Ser Gly
241 35 40 45
244 Arg Phe Tyr Thr Lys Pro Pro Gln Cys Val Asp Ile Pro Ala Asp Leu
245 50 55 60
248 Arg Leu Cys His Asn Val Gly Tyr Lys Lys Met Val Leu Pro Asn Leu
249 65 70 75 80
252 Leu Glu His Glu Thr Met Ala Glu Val Lys Gln Gln Ala Ser Ser Trp
253 85 90 95
256 Val Pro Leu Leu Asn Lys Asn Cys His Ala Gly Thr Gln Val Phe Leu
257 100 105 110
260 Cys Ser Leu Phe Ala Pro Val Cys Leu Asp Arg Pro Ile Tyr Pro Cys
261 115 120 125
264 Arg Trp Leu Cys Glu Ala Val Arg Asp Ser Cys Glu Pro Val Met Gln
265 130 135 140
268 Phe Phe Gly Phe Tyr Trp Pro Glu Met Leu Lys Cys Asp Lys Phe Pro
269 145 150 155 160
272 Glu Gly Asp Val Cys Ile Ala Met Thr Pro Pro Asn Ala Thr Glu Ala
273 165 170 175
276 Ser Lys Pro Gln Gly Thr Thr Val Cys Pro Pro Cys Asp Asn Glu Leu
277 180 185 190
280 Lys Ser Glu Ala Ile Ile Glu His Leu Cys Ala Ser Glu Phe Ala Leu
281 195 200 205
284 Arg Met Lys Ile Lys Glu Val Lys Lys Glu Asn Gly Asp Lys Lys Ile
285 210 215 220
288 Val Pro Lys Lys Lys Pro Leu Lys Leu Gly Pro Ile Lys Lys Lys
289 225 230 235 240
292 Asp Leu Lys Lys Leu Val Leu Tyr Leu Lys Asn Gly Ala Asp Cys Pro
293 245 250 255
296 Cys His Gln Leu Asp Asn Leu Ser His His Phe Leu Ile Met Gly Arg
297 260 265 270
300 Lys Val Lys Ser Gln Tyr Leu Leu Thr Ala Ile His Lys Trp Asp Lys
301 275 280 285
304 Lys Asn Lys Glu Phe Lys Asn Phe Met Lys Lys Met Lys Asn His Glu
305 290 295 300
308 Cys Pro Thr Phe Gln Ser Val Phe Lys
309 305 310

VERIFICATION SUMMARY

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Input Set : A:\099-US1.ST25.txt

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11 M:270 C: Current Application Number differs, Replaced Current Application No

11 M:271 C: Current Filing Date differs, Replaced Current Filing Date